

Openreach Business Briefing

04 December 2019



Forward looking statement

Certain statements in this presentation are forward-looking and are made in reliance on the safe harbour provisions of the US Private Securities Litigation Reform Act of 1995. These statements include, without limitation, those concerning: our service delivery strategy and transformation plans; our financial expectations including revenue, opex, capex and FTTP investment; and our roll out of FTTP.

Although BT believes that the expectations reflected in these forward-looking statements are reasonable, it can give no assurance that these expectations will prove to have been correct. Because these statements involve risks and uncertainties, actual results may differ materially from those expressed or implied by these forward-looking statements.

Factors that could cause differences between actual results and those implied by the forward-looking statements include, but are not limited to: market disruptions caused by technological change and/or intensifying competition from established players or new market entrants; unfavourable changes to our business where Ofcom raises competition concerns around market power; unfavourable regulatory changes; disruption to our business caused by an uncertain or adversarial political environment; geopolitical risks; adverse developments in respect of our defined benefit pension schemes; adverse changes in economic conditions in the markets served by BT, including interest rate risk, foreign exchange risk, credit risk, liquidity risk and tax risk; financial controls that may not prevent or detect fraud, financial misstatement or other financial loss; security breaches relating to our customers' and employees' data or breaches of data privacy laws; failures in the protection of the health, safety and wellbeing of our people or members of the public or breaches of health and safety law and regulations; controls and procedures that could fail to detect unethical or inappropriate behaviour by our people or associates; customer experiences that are not brand enhancing nor drive sustainable profitable revenue growth; failure to deliver, and other operational failures, with regard to our complex and high-value national and multinational customer contracts; changes to our customers' needs or businesses that adversely affect our ability meet contractual commitments or realise expected revenues, profitability or cash flow; termination of customer contracts; natural perils, network and system faults or malicious acts that could cause disruptions or otherwise damage our network; supply chain failure, software changes, equipment faults, fire, flood, infrastructure outages or sabotage that could interrupt our services; attacks on our infrastructure and assets by people inside BT or by external sources like hackers, criminals, terrorists or nation states; disruptions to the integrity and continuity of our supply chain (including any impact of global political developments with respect to Huawei); insufficient engagement from our people; and risks relating to our BT transformation plan.

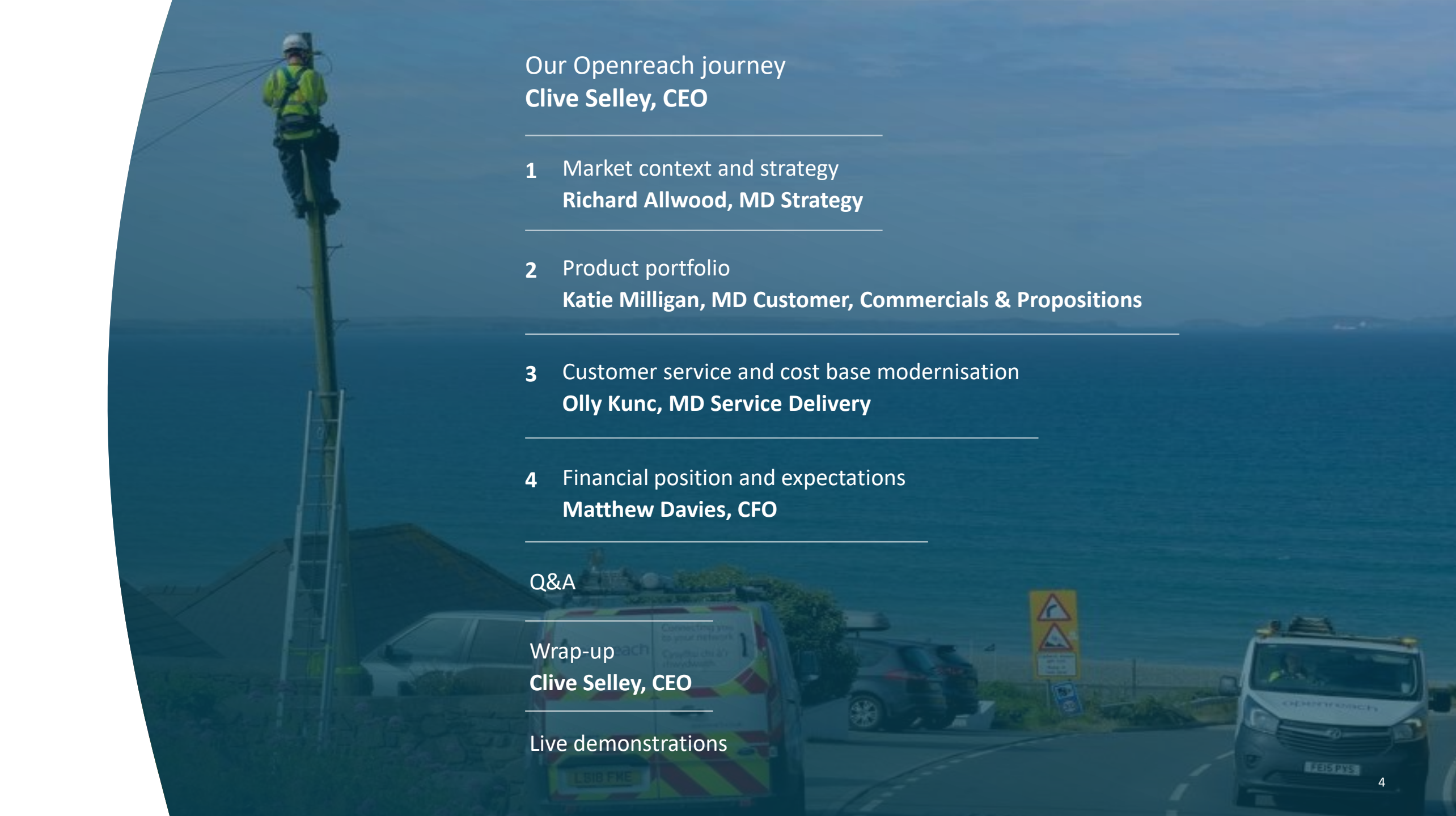
BT undertakes no obligation to update any forward-looking statements whether as a result of new information, future events or otherwise.



Welcome

Clive Selley
CEO, Openreach





Our Openreach journey

Clive Selley, CEO

1 Market context and strategy
Richard Allwood, MD Strategy

2 Product portfolio
Katie Milligan, MD Customer, Commercial & Propositions

3 Customer service and cost base modernisation
Olly Kunc, MD Service Delivery

4 Financial position and expectations
Matthew Davies, CFO

Q&A

Wrap-up
Clive Selley, CEO

Live demonstrations

Openreach journey

transforming the way we operate...

Creating Openreach Ltd

1. **Independent, wholly owned subsidiary** of BT Group plc
2. Majority independent board
3. **UK's largest ever TUPE¹ process**
4. Business wide re-branding
5. **Huge rise** in employee engagement



1. TUPE – Transfer of Undertakings (Protection of Employment) Regulations

Openreach journey

transforming the way we operate...

Regulation

1. **Positive relationship with Ofcom**
2. **Significant price reductions** imposed to date, but not expecting any further major price reductions
3. Tougher regulated **service level obligations** and will continue to improve by working with CPs¹
4. **5 year regulatory cycles** covering all products, starting April 2021
5. Regulatory environment shifting very materially to support investment with the fibre 'enablers'



1. CPs – Communications Providers

Openreach journey

transforming the way we operate...

Service improvement

1. We must **continue to provide better service**, to improve the customer experience and reduce unnecessary cost
2. **Service is better than ever**
 - Network faults reduced by 6% year-on-year
 - Delivering 18% more Ethernet circuits year-on-year
 - Missed appointments by our engineers at record lows
3. Moving to FTTP – a **service ‘game changer’**

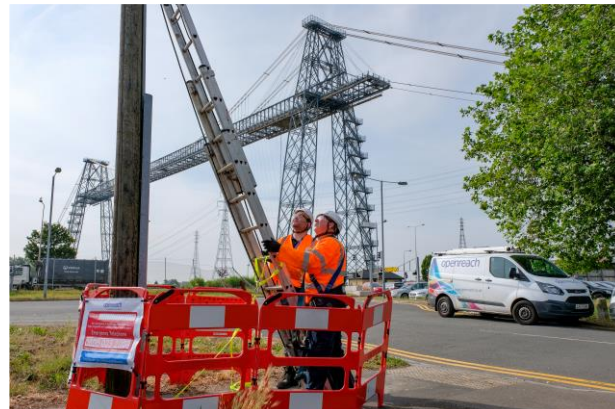


Openreach journey

transforming the way we operate...

Network strategy

1. Made superfast broadband (FTTC¹) available to nearly **28m homes and businesses**
2. Maximising the value of the FTTC platform, **with over 13m** customers
3. **Efficient build and strong take up** of FTTC gives us confidence for FTTP investment and monetisation
4. Re-inventing Openreach as a **Full Fibre business**
 - Now **deploying FTTP² to a premise every 26 seconds**, accelerating build rate every quarter



1. FTTC – Fibre to the Cabinet
2. FTTP – Fibre to the Premises

Fibre First

We have a Full Fibre ambition



Largest FTTP network in the UK

- Over 2m premises passed, 4m by March 2021
- Ambition to pass 15m by mid-2020s, subject to the right conditions
- Ultimately want to cover most of the UK



Building at the fastest rate

- Currently passing c.23,000 premises per week
- Ultimately believe we can pass c.3m premises per year



Building at low cost and high quality

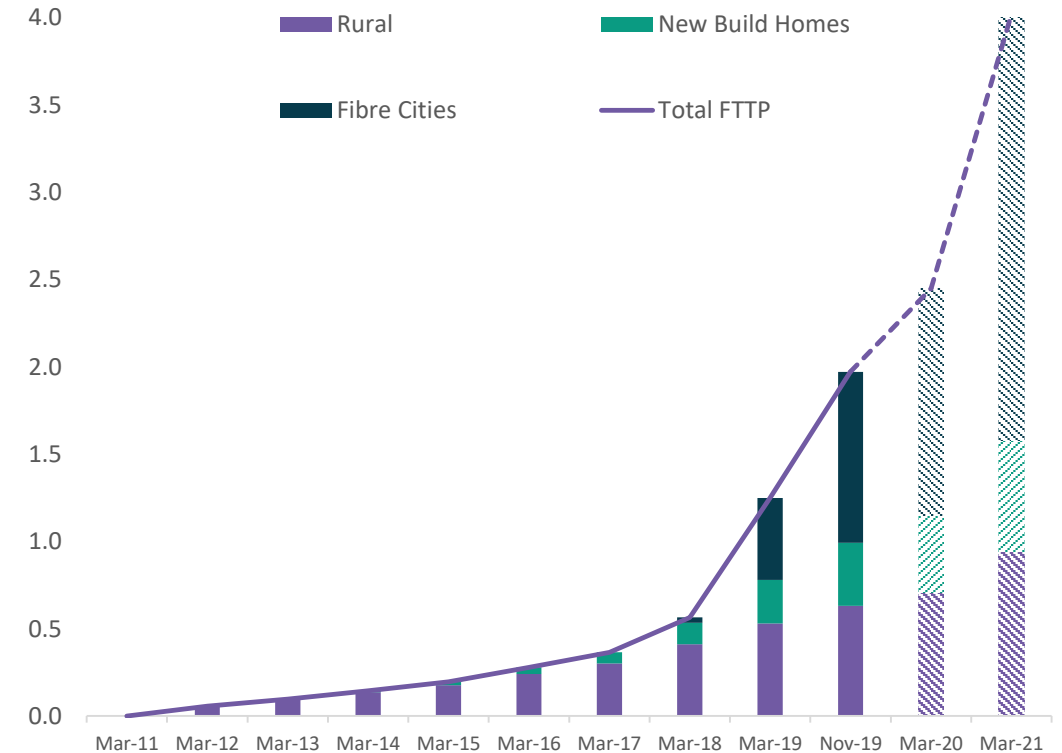
- Scoured the world for best-practice
- Secured people & equipment supply chains



Selling it increasingly quickly

- Refining our provisioning techniques and cost
- Pricing the platform increasingly competitively

Premises passed (m)



Building a better Openreach for the future



Continue to raise service levels, eliminating failure costs



Maximise value of the FTTC platform



Build FTTP infrastructure faster, cheaper and to high quality



Work with Communications Provider customers to drive rapid FTTP take-up



Work hard to secure fibre 'enablers' from Regulator and Government



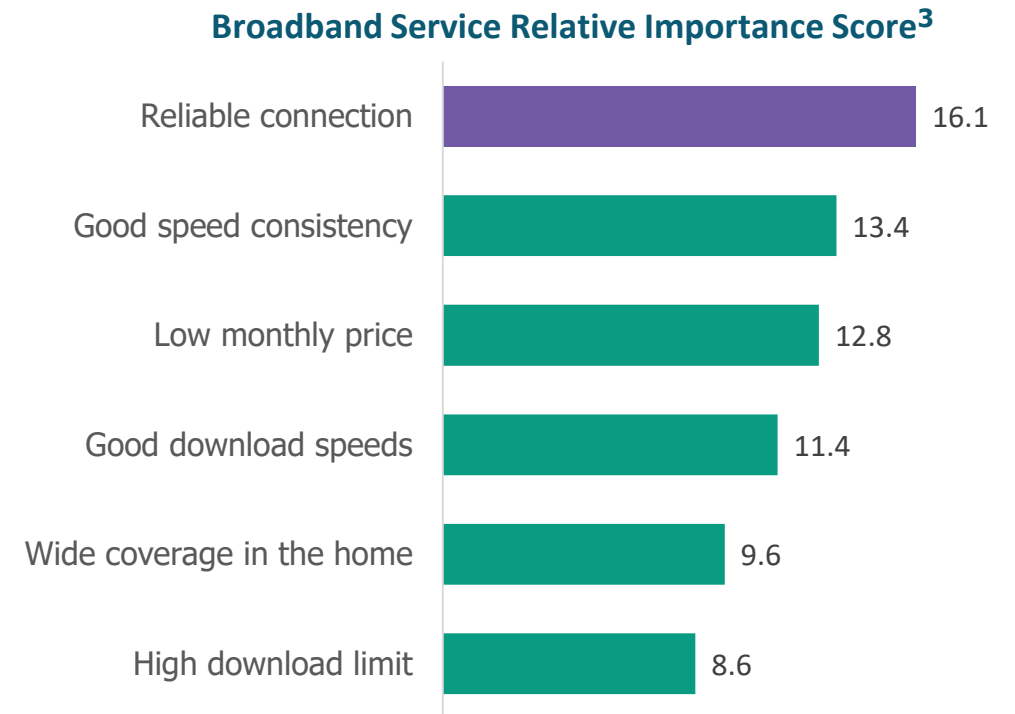
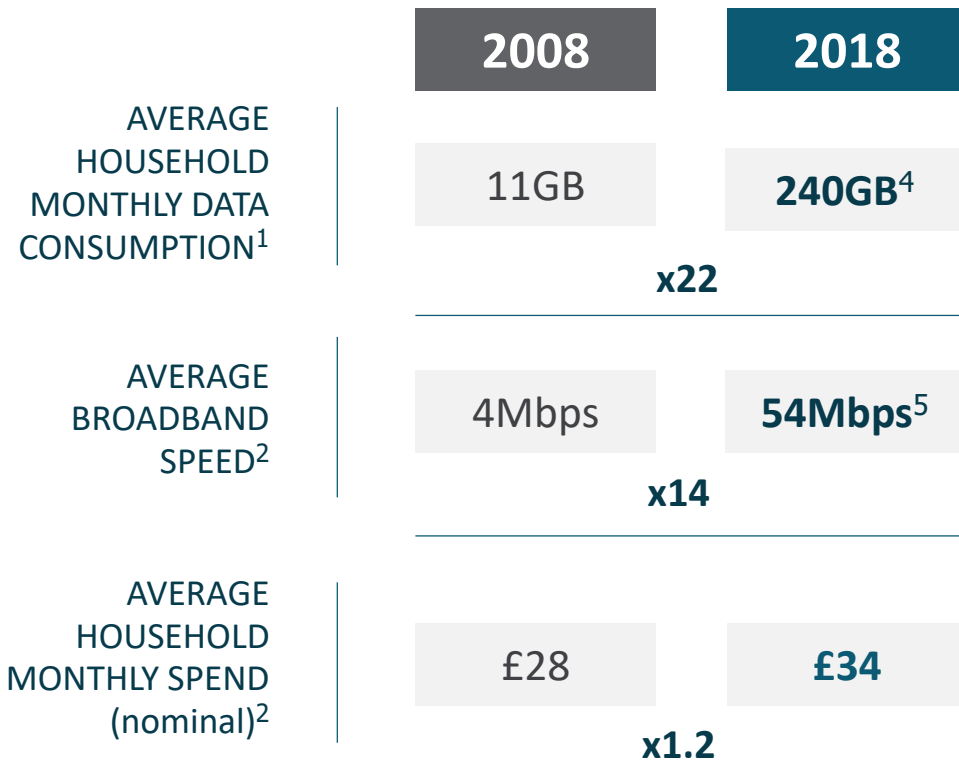
Richard Allwood
MD Strategy

Market Context & Strategy



Customers

Customers will pay more for higher quality broadband services;
higher quality is not just about speed



* Relative importance index (out of 100), not all categories shown.

1. Ofcom report for 2018, 2008 derived from Ofcom reports for 2011 & 2006

2. Ofcom reports, data from stated years.

3. Openreach Market Research, 2019 (Incite). Relative importance index (out of 100), not all categories shown

4. GB – Gigabyte

5. Mbps – Megabits per second

Public policy

The public policy goal is consistent despite the uncertain political context

66

The Government has set clear, ambitious targets for the availability of full fibre...we want to see 15 million premises connected to full fibre by 2025, with coverage across all parts of the country by 2033.

**Future Telecoms
Infrastructure Review -
DCMS, July 2018**



99

66

We intend to bring full fibre and gigabit-capable broadband to every home and business across the UK by 2025.

**Boris Johnson,
November 2019**



99

66

It's time to make the very fastest full-fibre broadband free to everybody, in every home in every corner of our country. Making it free and available to all will open up opportunities for everybody.

**Jeremy Corbyn,
November 2019**

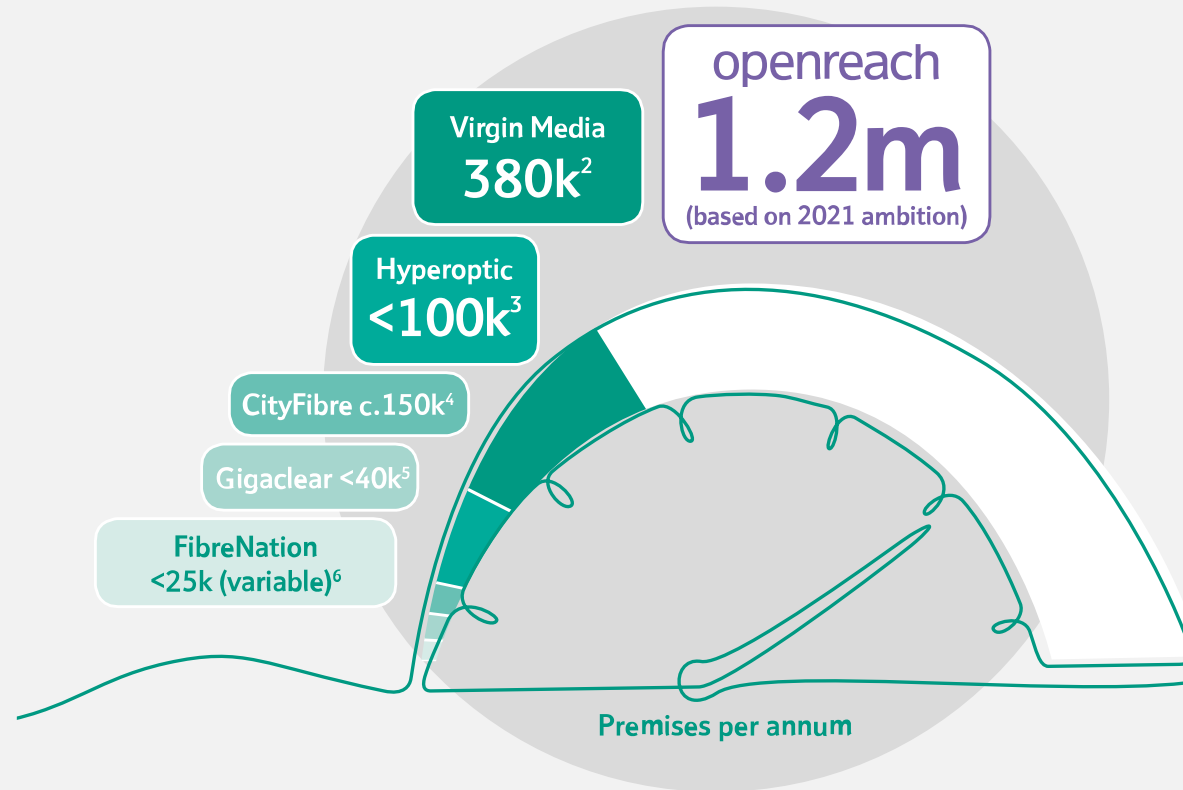


99

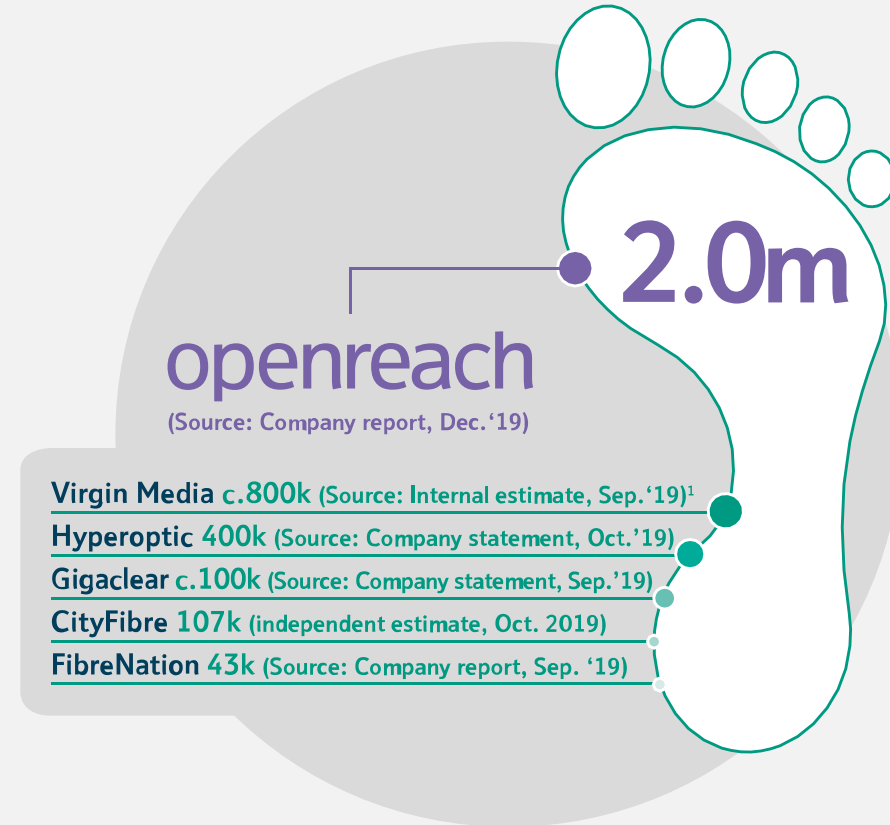
Competitors*

We have developed clear momentum in our build, reaching 2m premises passed

Build rate/year



Current footprint

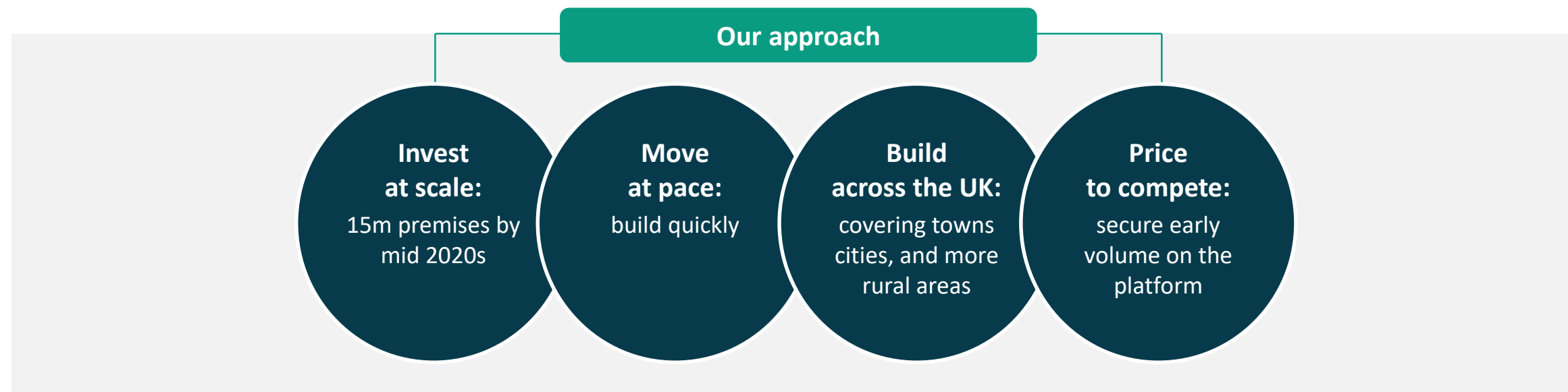


1. Internal estimate, based in part on independent (Point Topic) coverage estimates and company reports. 2. Internal estimate, based on 2019 quarterly run rate (c.95k) as taken from company reports (Q1) and internal estimates (Q2 + Q3)
3. Internal estimate based on company stated build progress. 4. Extrapolated from independent (ThinkBroadband) 2019 coverage estimates (7.5k/month Feb. to Aug., ≤15k/month Aug. to Oct.).
5. Internal estimate based on company stated build progress. 6. Based on company reported build progress.

*Competitor data is based on data which each competitor has put into the public domain.

Response – FTTP investment

Scale investment in FTTP is our preferred approach, if it is supported by regulatory and policy enablers



This investment will unlock

a transformed
customer experience

a radically simpler
operating model

a competitive
platform that can win

fair returns
for investors

Securing the enablers needed to achieve fair returns

We're making progress

1

Indexation of legacy services

Ofcom has proposed indexation of legacy services in prospectively competitive areas

2

Premium for FTTP anchor

Ofcom has proposed to set an FTTP anchor price at a modest premium to FTTC and allow this to index, with pricing flexibility above the anchor

3

Support for switchover

Ofcom is supportive of switchover in principle. We have proposed that stop-sell begin once 75% of premises have ultrafast available

4

Pricing flexibility

Ofcom has proposed that Openreach is unable to discount FTTP prices geographically within the prospectively competitive area

5

Fair bet clarity

Ofcom is supportive of the principle. We have asked for further detail on the mechanics

6

Business rates exemption

We continue to engage with Government on the need to exempt FTTP from business rates to help secure investment

7

Policy Change

In October's Queen's Speech there was some welcome changes proposed to wayleaves and mandating full fibre in new build homes

8

Approach to 'final 3rd'

We have proposed an extension of indexation and anchor uplift (alongside Government funding for the final 10%-20%)

Summary



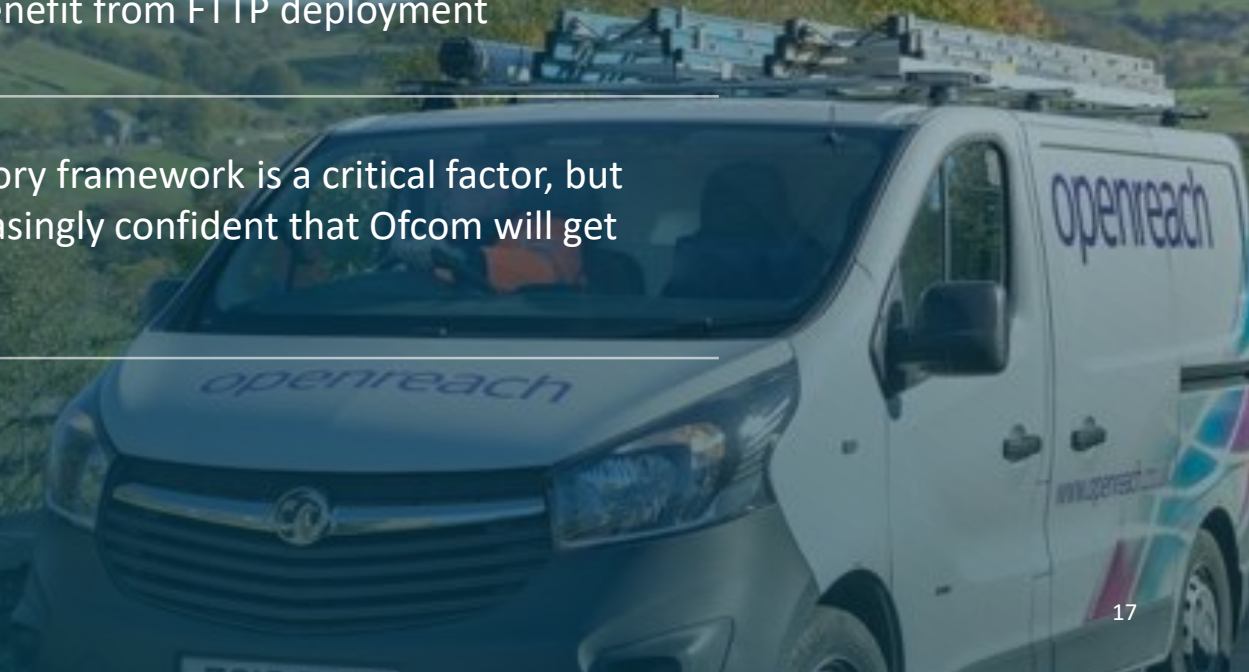
The environment is shifting in a way that will reward large scale investment in FTTP over the 2020s



We are gearing up to be ready. We're pleased with the start we've made and we think we're very well placed to drive and benefit from FTTP deployment



The regulatory framework is a critical factor, but we're increasingly confident that Ofcom will get this right

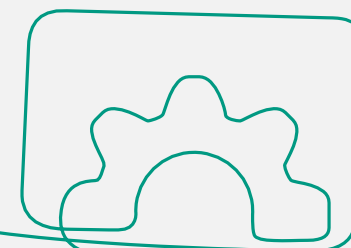




Product Portfolio

Katie Milligan

MD, Customer, Commercials & Propositions



Trading and Product Portfolio

A reminder of our market

Voice & Broadband



£4.2bn
revenue

Ethernet



£725m
revenue

Infrastructure access



£2m
revenue

Our key priorities across all customers

1

Deepening relationships
with customers from
transactional to partnerships

2

Transforming our portfolio as the
market and competition changes

3

Working with our customers to deliver
compelling propositions

Our objective

Fill our network and ensure we have sustainable demand that gives us confidence to invest in the future

Voice & Broadband Portfolio

Embracing digital transformation

Voice



Launch **digital**
product portfolio



Publish **pricing** and
incentivise migration



Complete the **transition**
to All IP¹ technology



Withdraw the
PSTN² network

Broadband



Moving customers
to **superfast**



Getting the **FTTP**
list pricing right



Run **short-term**
offers in cities



Construct
long-term deals

1. IP – Internet Protocol
2. PSTN – Public Switched Telephone Network

Business Connectivity & Corporate

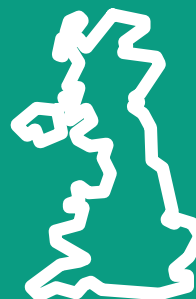
Ever-increasing demand for bandwidth is driving the business market in both access and backhaul

Backhaul



- Scalable portfolio to meet bandwidth demand
- Bespoke customer deals
- Mobile backhaul to support 5G

Ethernet



- Record demand
- Bandwidth demand increasing – up to 1Gbps
- Evolving portfolio

Business FTTP



- FTTP driving convergence of consumer and business needs
- Growth opportunity in SME¹ market

Infrastructure access

We're committed to delivering scalable products to help others build

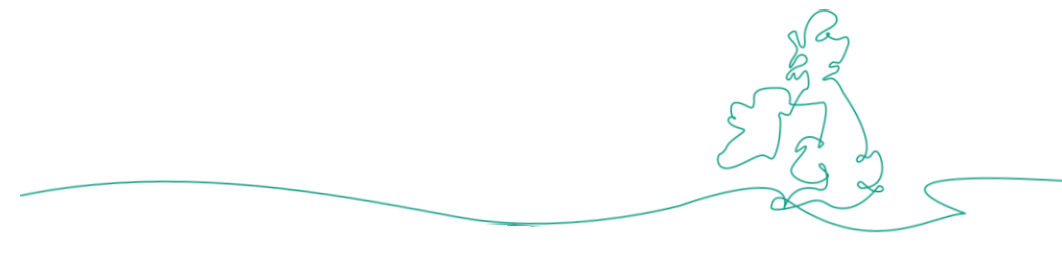
Ducts & Poles

- ✓ **Launched revised product in April 2019** and enhanced scalability and usability in October 2019
- ✓ **Empowered** customers to self-serve and drive down cost to build
- ✓ **Deeper integration** with customers to allow them to scale their build more effectively



Dark Fibre Interexchange

- ✓ Dark fibre product available from **non-competitive exchange** to any other exchange
- ✓ **Launch** on the 20th December 2019
- ✓ Enables **smaller CPs** to build out across the UK



Summary



Openreach has a unique position in the market offering nationwide access to over 600 CPs who are providing real choice to end customers



The strategy is clear – we get customers on the right platform, then move them on to the best products



It's an exciting time – we have an FTTP platform growing faster than anyone else, and we're the scale provider in this market



Olly Kunc
MD, Service Delivery

Customer Service & Cost Base Modernisation



Service Delivery – Overview

Service Delivery contains 60% of the people in Openreach and 40% of the cost base

20k people

Service Delivery Consists of **20,000** people across the UK including **16,500** Field Engineers

9.8m



Engineering jobs in 2018/19

on behalf of over **600** Communications Providers

176m km

national network

Across a national network that is **176,000,000 km** long, supported by **4,800,000** telegraphs poles and junction boxes



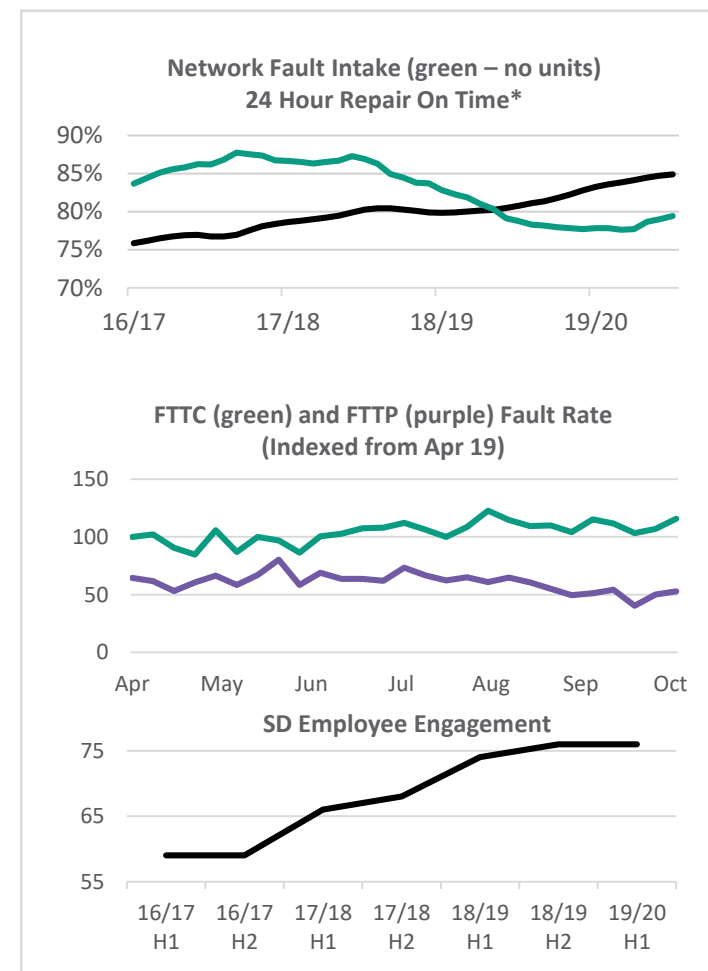
Focused
in recent years on improving **service and network performance** on our copper network

Top quartile
performance in employee engagement gives us the opportunity to deliver bigger transformation

50%

lower network fault rate

Starting the transition to FTTP – a platform already performing at 50% lower network fault rate and unaffected by weather



Service Delivery – Transition to FTTP

We are at the beginning of a mass provision journey and are learning fast so we can reduce cost

450k lines

We have provided nearly 450k lines to date and are delivering over 5k a week and growing

We are learning and maturing rapidly to improve experience and reduce cost per install



Engineers training and growing in experience



Developing processes and IT



Innovating in components and techniques

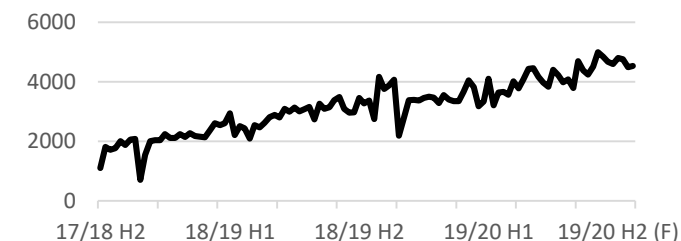


High volume local selling to reduce travel time

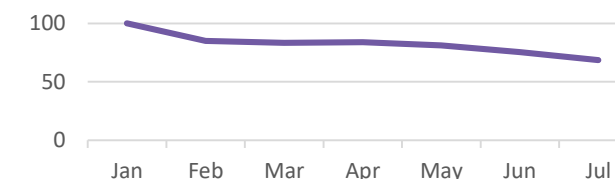


Deep integration with CPs for seamless customer journeys

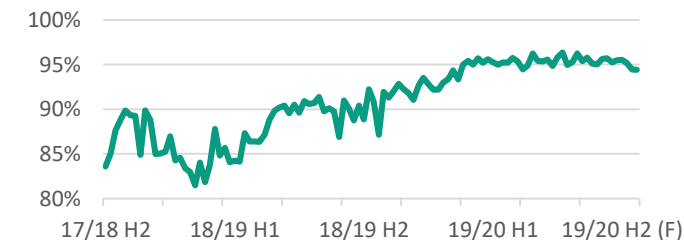
FTTP Weekly Order Completions



FTTP – Unit Cost Performance
(Indexed from Jan 19)

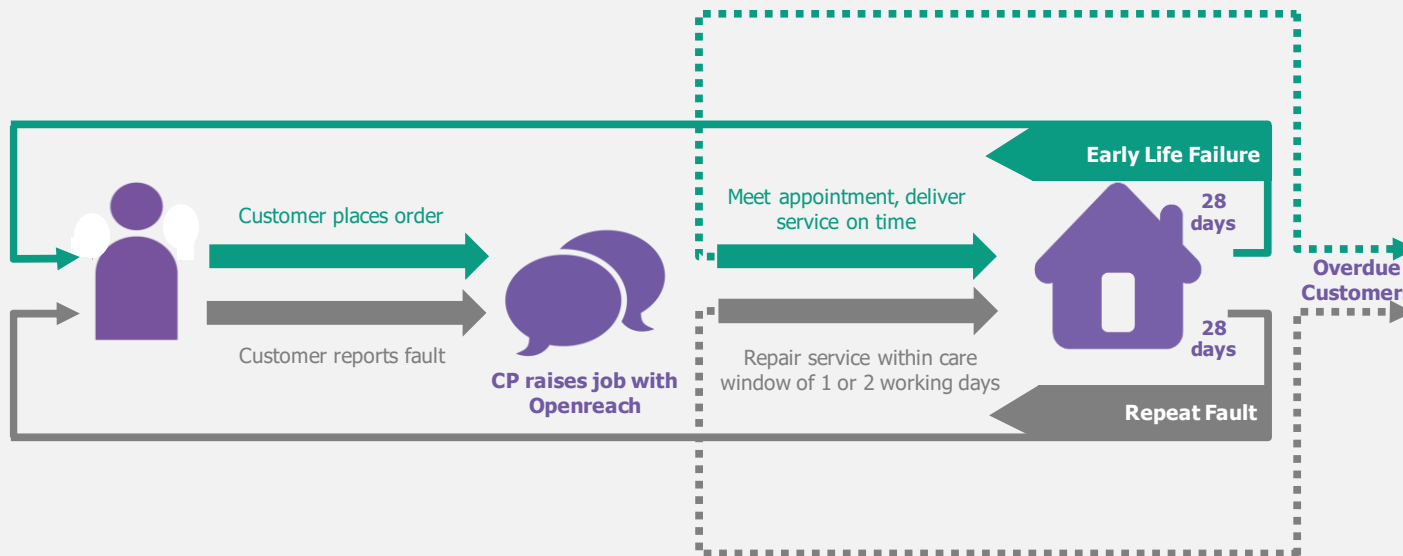


FTTP On-Time Delivery



Service Delivery - Opportunity on copper platform

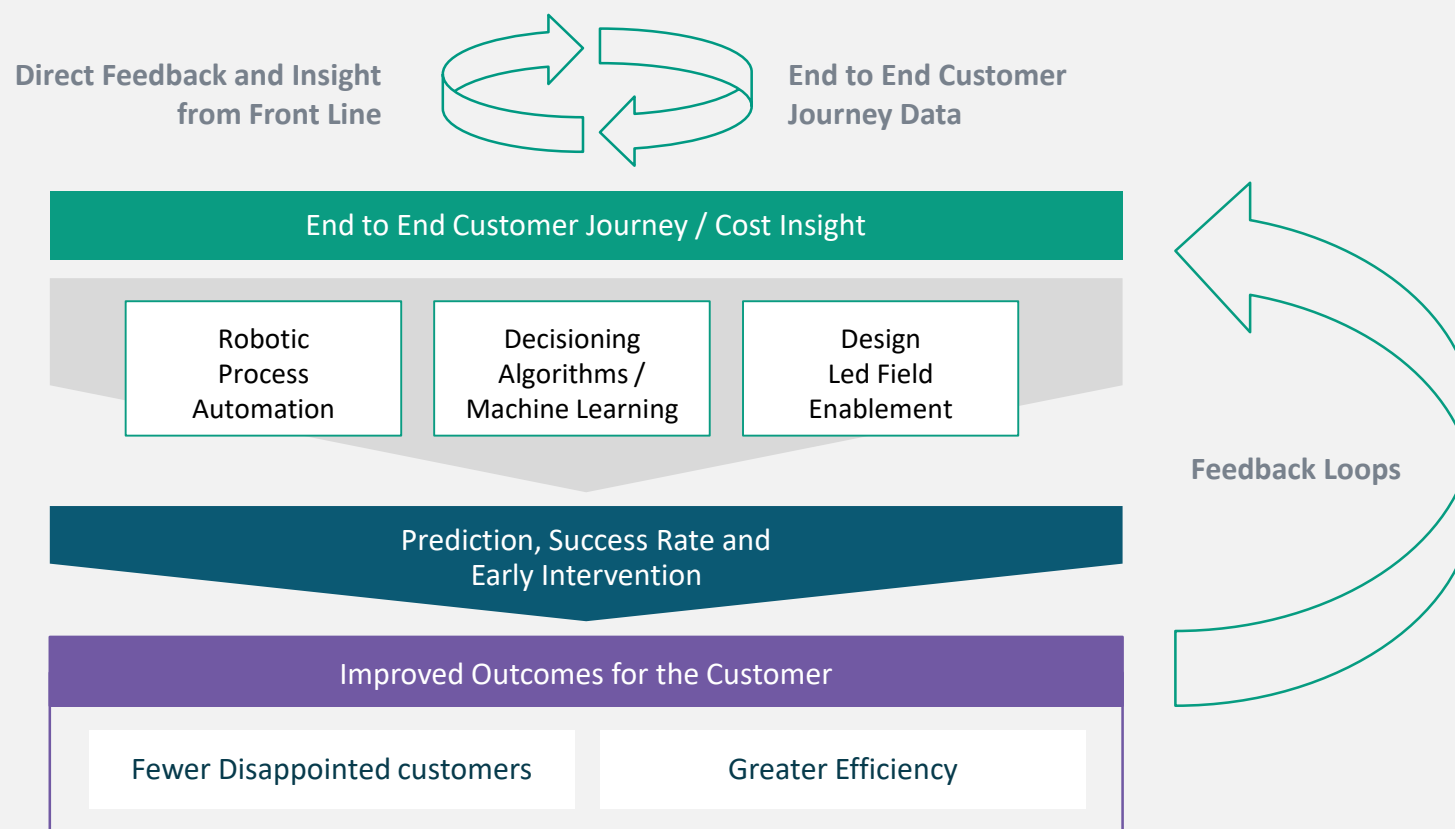
There is significant efficiency and customer service opportunity by reducing fault rate and wasted effort in failed journeys



1. Provision orders drive revenue, faults mostly do not – **reducing fault rate** through network intervention is positive
2. Our legacy systems and processes can lead to on **day failures**
3. Many jobs remain **stuck in our processes** – costing penalty payments and absorbing resource
4. **Simplifying and intervening** in these processes will significantly improve customer service and cost efficiency
5. We have launched a programme to utilise new techniques to **tackle this opportunity**
6. Delivering **first time, every time and on time**

Service Delivery – Approach to transformation

Improve service and efficiency by analysing end-to-end customer journeys, removing process inefficiencies and enabling our engineers to improve success rate



Summary



Continue to improve service every day – keeping our customers happy and engaging our engineers



Rapidly develop our FTTP provision ways of working to bring down cost and delight customers



Transform our copper platform processes to reduce failure costs and disappointed customers





Matthew Davies
Chief Financial Officer

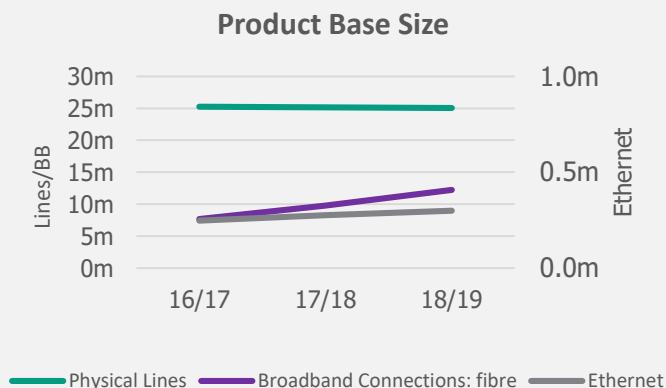
Financial Position & Expectations



Revenue

Resilient customer base and improving mix has been offset by lower prices driven by regulation and the volume discount deal

1 Base resilient and mix improving



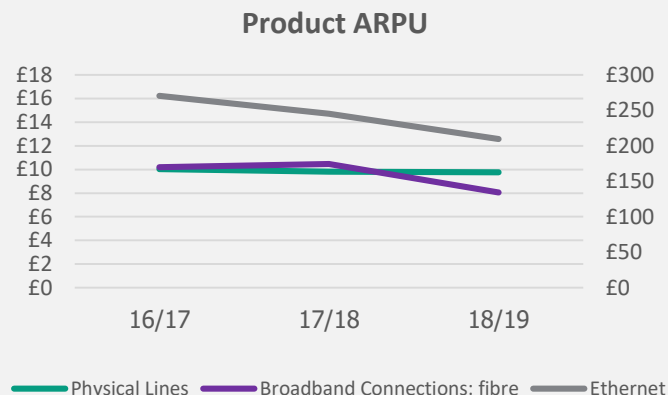
LOOKING BACK

- Physical line base resilient
- Broadband fibre growth supported by volume deal
- Ethernet growth steady

LOOKING FORWARD

- Physical lines declines from increasing competition
- FTTC growth should be sustained to FY22
- FTTP growth to accelerate in the longer term

2 Price reductions offset mix upside



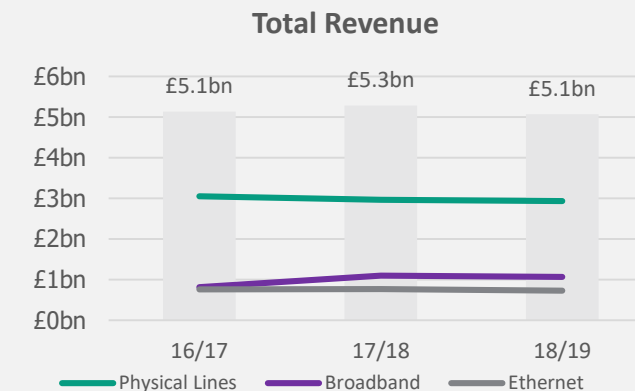
LOOKING BACK

- Physical line ARPU¹ stable
- Broadband fibre ARPU declining from regulatory and volume discounts
- Ethernet ARPU declining from regulatory impacts

LOOKING FORWARD

- Physical lines ARPU steady / growing with inflation (subject to enablers)
- Broadband fibre (FTTC) steady / growing with inflation (subject to enablers)
- Broadband fibre (FTTP) supported by £1 to £2 anchor premium (subject to enablers)

3 Resulting in broadly flat revenue



LOOKING BACK

- Total revenue broadly flat
- Physical line revenue declining offset by growth in Broadband fibre revenue
- Ethernet revenues broadly flat

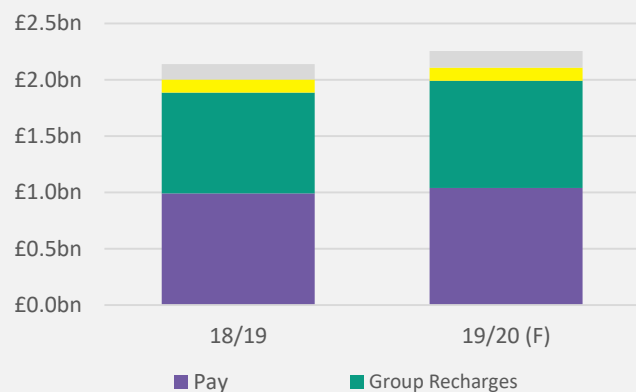
LOOKING FORWARD

- Physical lines revenue decline - enablers not sufficient to offset volume decline
- Broadband fibre growth driven by increased FTTC / FTTP penetration and indexation (subject to enablers)
- Ethernet growth driven by volume

Opex costs dominated by pay and group recharges which have both been increasing

1 Opex costs increasing

Opex Cost Categories



LOOKING BACK

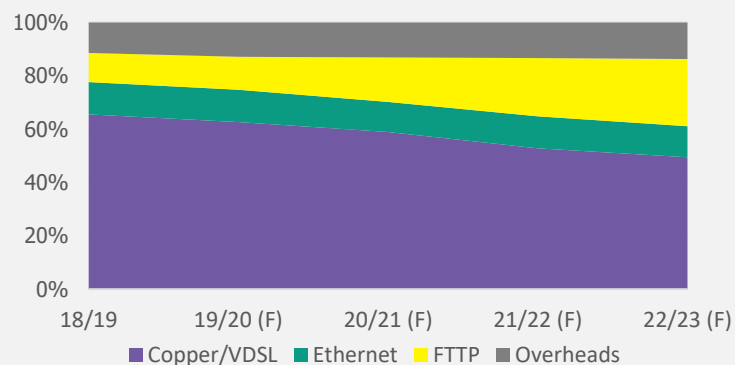
- Growth in pay driven by inflation and increasing FTE¹ to support FTTP build and higher service standards
- Increases in Group recharges driven by business rates

LOOKING FORWARD

- Pay growth to continue, driven by inflation and growth in FTE to support FTTP build
- Business rates also continue to grow until 22/23

2 Proportion of FTTP spend growing

Direct Opex by technology*



LOOKING BACK

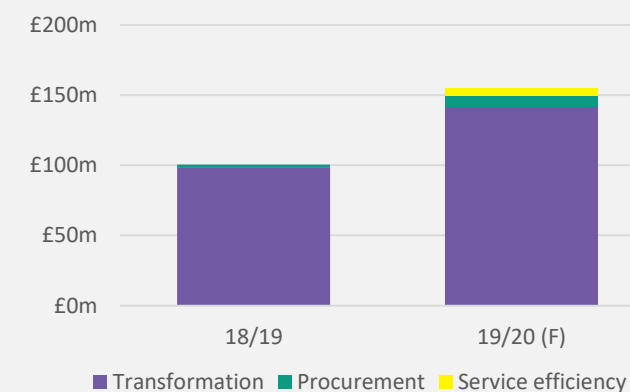
- To date the costs dominated by Copper/FTTC and Ethernet

LOOKING FORWARD

- Increasing proportion of costs to support FTTP, with reduced costs per line driven by lower fault rates

3 Partly offset by gross savings

Gross Savings versus 17/18 Baseline



LOOKING BACK

- Growth in pay and Group recharges partly offset by c.4% direct Opex efficiency

LOOKING FORWARD

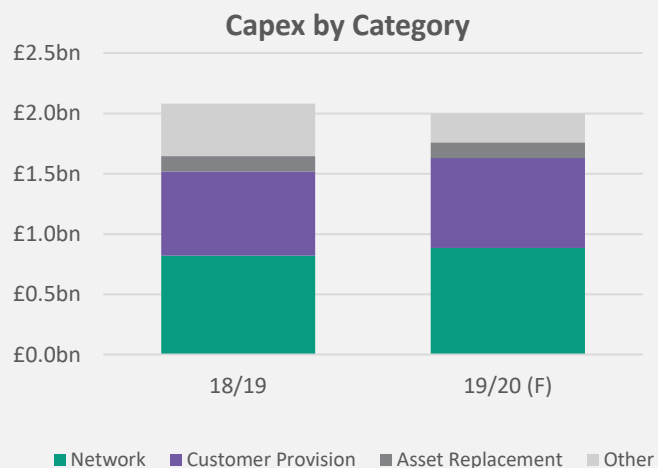
- Efficiency contribution to increase, supported by the service efficiency programme

* Excludes Group Recharges / assumes 15m business case

1. FTE – Full-time equivalent

Capex growth driven by increased network spend on FTTP partly offset by reduced copper spend

1 Capex costs increasing



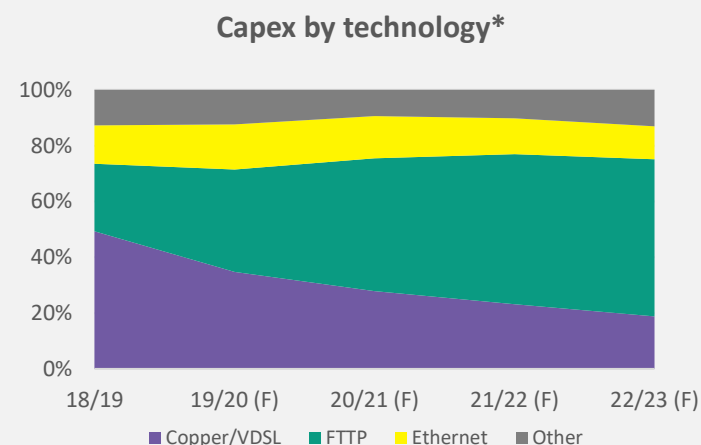
LOOKING BACK

- Network capex growth driven by FTTP build
- Customer provision growth driven by FTTC take-up

LOOKING FORWARD

- Investment in customer provision to continue as FTTC penetration increases to FY22
- In longer term FTTP provision to grow significantly

2 Increasing proportion of FTTP spend



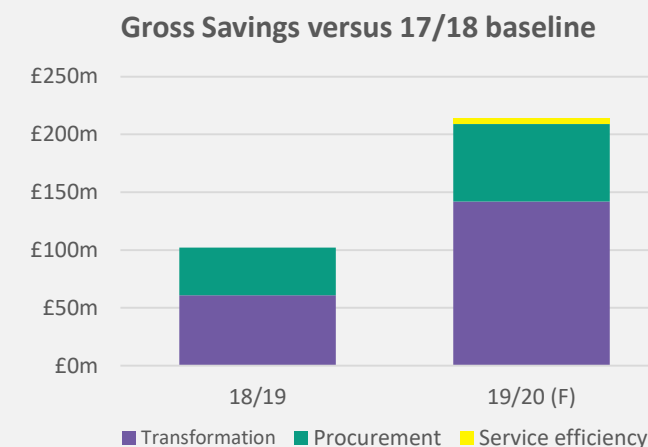
LOOKING BACK

- Growth in FTTP partly offset by reduction in copper/FTTC
- Majority of copper decline driven by lower network investment with copper provision flat

LOOKING FORWARD

- Continuation of reducing copper spend more than offset by increased FTTP investment

3 Partly offset by gross savings



LOOKING BACK

- Growth in network investment partly offset by c.4% efficiency
- Efficiency driven primarily through transformation and procurement

LOOKING FORWARD

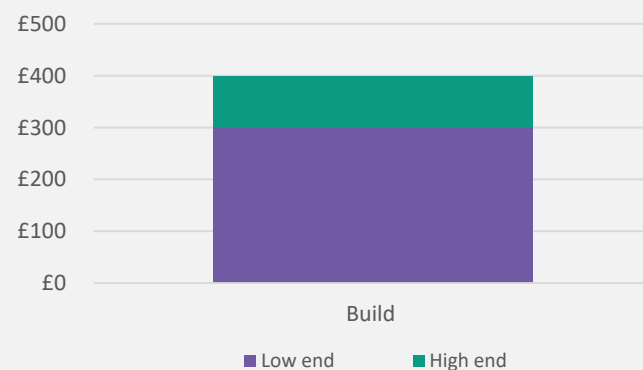
- Transformation efficiency to be sustained with majority of service benefits in Opex

FTTP Investment

There are three key dynamics that drive the business case that would support a fair return for our shareholders

1 Build costs

Build Costs



KEY ENABLERS

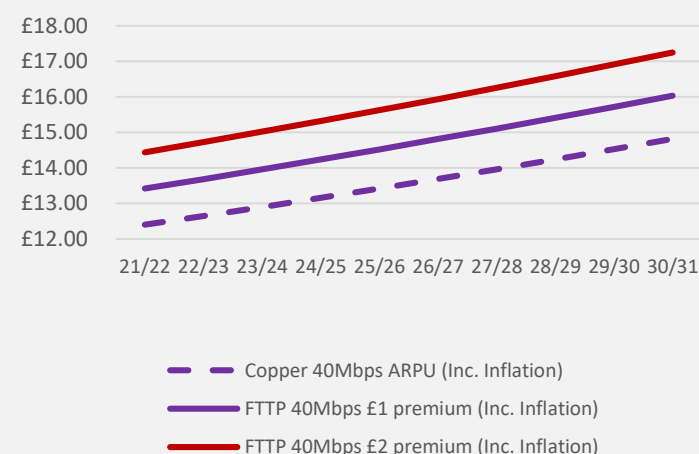
- Barrier busting and cumulo relief from Government
- Securing competitive outcome based deals from sub-contractors
- Rapid migration reducing provision costs

OUTLOOK

- Confident on build costs with actuals coming in at the lower end of the range
- Too soon to call provision costs

2 Take-up and ARPU

FTTP 40Mbps ARPU



KEY ENABLERS

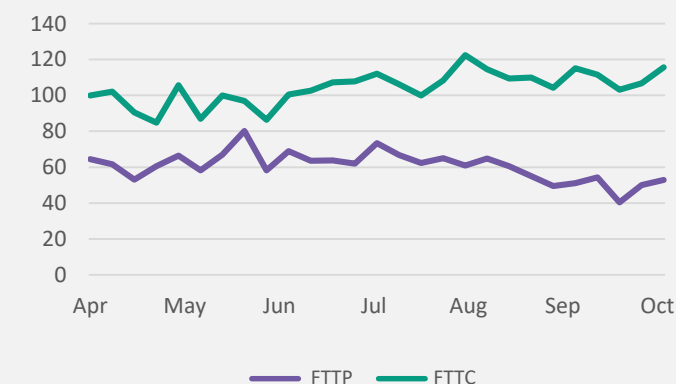
- Price inflation, copper withdrawal and FTTP anchor
- Focused on securing volume deals with CPs

OUTLOOK

- Confident on securing the enablers
- In discussions with CPs to find a volume deal that works for all parties

3 Increasingly efficient network

FTTC and FTTP Fault Rate (Indexed from Apr 19)



KEY ENABLERS

- Rapid migration and copper withdrawal

OUTLOOK

- Significant reduction in network faults seen in FTTP deployed to date
- Benchmarks from roll out of FTTP in other regions also encouraging

Summary



No major regulatory price reductions and future indexation – supporting sustained revenue growth



Increased efficiency and migration to FTTP – helping to partly offset Opex investment in Service and FTTP



Reduction in copper network investment and longer term copper provision – helping to partly offset Capex investment in FTTP



Increasingly confident that our FTTP investment will give a fair return to shareholders:

- Build costs at the lower end of expectations
- Constructive conversations with CPs on take up and price points
- Operational savings being realised in line with expectations
- Positive signs on securing the enablers



Clive Selley
CEO, Openreach



Building a better Openreach for the future



Continue to raise service levels, eliminating failure costs



Maximise value of the FTTC platform



Build FTTP infrastructure faster, cheaper and to high quality



Work with Communications Provider customers to drive rapid FTTP take-up



Work hard to secure fibre 'enablers' from Regulator and Government





Q&A



Clive Selley
CEO, Openreach

Wrap-up



openreach

The contents of this pack cannot be copied or reproduced in whole
or in part without the written consent of Openreach.

© British Telecommunications plc